

REMARKS

This amendment is responsive to the Office Action of July 17, 2008. Reconsideration and allowance of the **claims 2-6 and 8-34** are requested.

The Office Action

Claims 1, 11, 18, 21, and 32 were objected to because it was not specifically defined how eavesdropping is achieved from the claim language or specification of the application.

Claims 16 and 32 were objected to because of minor informalities.

Claim 31 was rejected under 35 U.S.C. 101 because "a computer readable medium...comprising" is not an acceptable language in computer-processing related claims.

Claim 31 was rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 1-15, 21-25, 27, 28, and 30 were rejected under 35 U.S.C. 102(e) as being anticipated by McCorkle (U.S. Patent Application Publication 2003/0174048).

Claim 17 was rejected under 35 U.S.C. 103(a) as being unpatentable over McCorkle.

Claim 26 was rejected under 35 U.S.C. 103(a) as being unpatentable over McCorkle in view of Pitchers (U.S. Patent Application Publication 2006/0111042).

Claim 29 was rejected under 35 U.S.C. 103(a) as being unpatentable over McCorkle in view of Nurminen (U.S. Patent Application Publication 2005/0135286).

Claim 16, 18, 19, 20, 31, and 32 was rejected under 35 U.S.C. 103(a) as being unpatentable over McCorkle in view of Wood Jr. (U.S. Patent 6,307,848).

The Present Application

The present application is directed to a method for obtaining range or positional information of devices by eavesdropping on messages passing between other devices in the system and determining the distances between the devices. The distance is determined between nodes in a network comprising a first, a second and a

third node, wherein the second node is within transmission range of the first and the third node, the method comprising the third node eavesdropping on a first message sent from the second node to the first node.

One objective of the present application is that by the use of eavesdropping the number of transmissions and the potential collisions associated with the transmissions is reduced. Thus, the power consumption of the nodes in the network is reduced.

The above description of the present application is presented to the Examiner as background information to assist the Examiner in understanding the application. The above description is not used to limit the claims in any way.

The References of Record

McCorkle is directed to a method and system providing a remote device the ability to send a signal with a maximum reliability and minimum use of power in response to received information. The method and system also perform distance measuring to determine whether a particular remote device is within a range criterion to enable communications.

Pitchers is directed to an electronic device that has a first wireless transceiver module for communicating using a first communication protocol and a second wireless transceiver module for communicating using a second communication protocol, the second wireless transceiver module comprising a controller for avoiding an interference with an external signal on a frequency of the second communication protocol.

Nurminen et al. is directed to a wireless proximity network containing a plurality of access points coupled to the network. Installed on each mobile device and access point are different means based on a range to enable peers to communicate with any other peer within the network.

Wood Jr. is directed to a method of establishing wireless communications between an interrogator and individual ones of multiple wireless identification devices, the method comprising utilizing a tree search method to establish communications without collision between the interrogator and individual ones of the multiple wireless identification devices.

Claim Objections

As per **claims 1, 11, 18, 21, and 32**, eavesdropping is achieved by listing to any message sent from a node within transmission range, including the ranging request of a device, initiating the ranging procedure, provided that the initiating device is within transmission range of the eavesdropping device.

Claims 16 and 32 were amended to correct the informalities cited by the Examiner.

35 U.S.C. 101

Claim 31 has been amended to “a computer readable medium encoded with a computer program” as suggested by the Examiner.

35 U.S.C. 112

Claim 32 has been amended to particularly point out and distinctly claim the second node referring to node B.

**The Claims Distinguish Patentably
Over the References of Record**

The claims are not anticipated by McCorkle (U.S. Patent Application Publication 2003/0174048).

More specifically, regarding **claim 8**, McCorkle does not disclose “the third node (C) eavesdropping on a first message (22) being transmitted from the second node (B) to the first node (A) and transmitting a second message (24) in response to the first message (22) and the second message (24) comprising second timing information” and “determining a distance between the second node (B) and the third node (C) by considering the time of transmission of the first message (T3), the time of reception of the second message (T7) and the second timing information.” Examiner refers Applicant to paragraph [0133] and Figure 7 items 703-711 which discloses the method of determining distances comprising the steps of transmitting a distance determining message with a transmitting time from a local device, receiving the distance determining message in each remote device, transmitting a response from each remote device in response to receiving the distance determining message,

receiving the response message at the local device and marking a receiving time for the response message reception, determining the delay from each remote device, and computing the distance to each remote device to the local device.

McCorkle does not disclose determining the distance between a second node and a third node by considering the time of the transmission of the first message, time of reception of the second message and the second timing information. McCorkle discloses messages being transmitted from a first node to a second node and determining the distance between the first and second node from the timing information corresponding to the transmitted messages. McCorkle does not disclose a third node eavesdropping a message being sent from a first node to a second node and in response to the eavesdropping transmitting a second message comprising second timing information. Additionally, McCorkle does not disclose determining a distance from a second and a third node from the time of transmittal first message, the time of transmittal of the second message, and the second timing information.

Accordingly, it is submitted that independent **claim 8** and **claims 2-6, 9-20, and 33** that depend therefrom distinguish patentably over the references of record.

Claim 21 is directed to a device which “determines a distance from a second node and a third node (C) based on the time of transmission of the first message (22), a time of the reception of the second message (T7) by the second node (B), and the second timing information.” Again, the Examiner refers Applicant to paragraph [0133] and Figure 7 items 703-711. McCorkle does not disclose the recitation of determining a distance from the second and third node from the time of transmittal first message, the time of transmittal of the second message, and the second timing information.

Accordingly, it is submitted that independent **claim 21** and **claims 22-30** that depend therefrom distinguish patentably over the references of record.

Claim 31 calls for a computer readable medium encoded with a computer program which controls a processor “to determine a distance between the second node (B) and the plurality of eavesdropping nodes (C, D, E) based on the reply period and range response (22).” Examiner cites paragraph [0133] and Figure 7 items 703-711 which teaches messages being transmitted from a first node to a second node and determining the distance between the first and second node from the timing

information corresponding to the transmitted messages. McCorkle does not teach or disclose determine a distance between a second node and a plurality of eavesdropping nodes based on the reply period and range response.

Accordingly, it is submitted that independent **claim 31** and **claim 32** that depends therefrom distinguish patentably over the references of record.

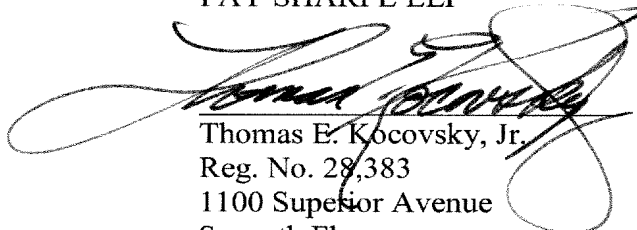
New **claim 34** has been added to emphasize the distinctions discussed above relative to the references of record.

CONCLUSION

For the reasons set forth above, it is submitted that claims 2-6 and 8-34 distinguish patentably and unobviously over the references of record. An early allowance of all claims is requested.

Respectfully submitted,

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